

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
13 October 2005 (13.10.2005)

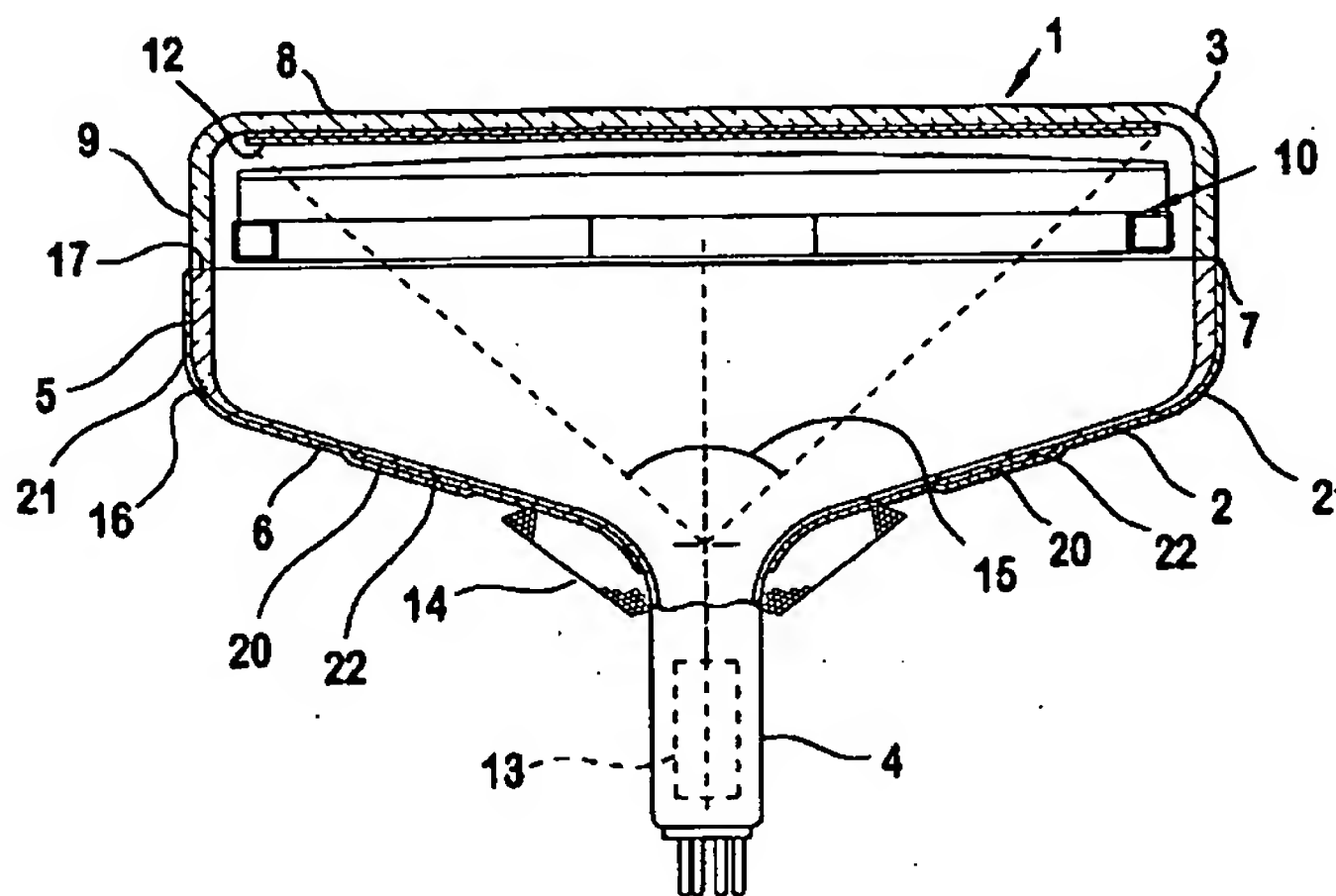
PCT

(10) International Publication Number  
**WO 2005/096339 A1**

- (51) International Patent Classification<sup>7</sup>: **H01J 29/87**, 29/86, 29/88
- (74) Agents: **TRIPOLI, Joseph, S. et al.**; 2 Independence Way, Suite #200, Princeton, NJ 08540 (US).
- (21) International Application Number: **PCT/US2004/035203**
- (22) International Filing Date: 22 October 2004 (22.10.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/551,588 9 March 2004 (09.03.2004) US
- (71) Applicant (for all designated States except US): **THOMSON LICENSING S.A.** [FR/FR]; 46, quai A. Le Gallo, F-92100 Boulogne-Billancourt (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **MALEY, James, John** [US/US]; 2513 Standardbred Drive, Lancaster, PA 17603 (US). **FULMER, Doreen, May** [US/US]; 727 East Marion Street, Lancaster, PA 17602 (US). **DIMELER, Jennifer, Leigh** [US/US]; 660 South Mount Joy Street, Elizabethtown, PA 17022 (US). **EDWARDS, James, Francis** [US/US]; 1829 Rockford Lane, Lancaster, PA 17601 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report

[Continued on next page]

(54) Title: **LIGHTWEIGHT HIGH DEFLECTION ANGLE CATHODE RAY TUBE AND METHOD OF MAKING THE SAME**



(57) Abstract: A cathode ray tube has an envelope (2) including a panel (3) and a neck (4) connected by a funnel (5). The funnel comprises a main body portion (16) having a seal edge (17) and a neck. The main body portion has at least one region with a higher tensile stress than other regions of the main body portion. An exterior surface of the main body portion has first and second protective coatings (20, 21). The first protective coating (20) covers at least a portion of the at least one region. The first protective coating is of a composition and thickness such that the first protective coating substantially reduces the susceptibility of the at least one region from incurring mechanical damage. The second protective coating (21) covers at least a portion of the first protective coating and is of a composition and thickness such that the second protective coating protects the funnel from moisture contact.

WO 2005/096339 A1



— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.